

M	M	M	M	M	E	WT-ROS
M	M	M	M	M	E	SYNROS
M	M	M	M	M	E	ROS-R
M	M	M	M	M	E	ROS-AR
M	M	M	M	M	E	MUC-R
L	L	L	L	L	V	WT-ROS
L	L	L	L	L	V	SYNROS
L	L	L	L	L	V	ROS-R
L	L	L	L	L	V	ROS-AR
L	L	L	L	L	V	MUC-R
P	P	P	P	P	A	WT-ROS
P	P	P	P	P	A	SYNROS
P	P	P	P	P	A	ROS-R
P	P	P	P	P	A	ROS-AR
P	P	P	P	P	A	MUC-R
L	L	L	L	L	E	WT-ROS
L	L	L	L	L	E	SYNROS
L	L	L	L	L	E	ROS-R
L	L	L	L	L	E	ROS-AR
L	L	L	L	L	E	MUC-R
K	K	K	K	K	D	WT-ROS
K	K	K	K	K	D	SYNROS
K	K	K	K	K	D	ROS-R
K	K	K	K	K	D	ROS-AR
K	K	K	K	K	D	MUC-R
H	H	H	H	H	K	WT-ROS
H	H	H	H	H	K	SYNROS
H	H	H	H	H	K	ROS-R
H	H	H	H	H	K	ROS-AR
H	H	H	H	H	K	MUC-R
R	R	R	R	R	R	WT-ROS
R	R	R	R	R	R	SYNROS
R	R	R	R	R	R	ROS-R
R	R	R	R	R	R	ROS-AR
R	R	R	R	R	R	MUC-R
E	E	E	E	E	A	WT-ROS
E	E	E	E	E	A	SYNROS
E	E	E	E	E	A	ROS-R
E	E	E	E	E	A	ROS-AR
E	E	E	E	E	A	MUC-R
Y	Y	Y	Y	Y	G	WT-ROS
Y	Y	Y	Y	Y	G	SYNROS
Y	Y	Y	Y	Y	G	ROS-R
Y	Y	Y	Y	Y	G	ROS-AR
Y	Y	Y	Y	Y	G	MUC-AR
Q	Q	Q	Q	Q	Q	WT-ROS
Q	Q	Q	Q	Q	Q	SYNROS
Q	Q	Q	Q	Q	Q	ROS-R
Q	Q	Q	Q	Q	Q	ROS-AR
Q	Q	Q	Q	Q	Q	MUC-AR

FIGURE 1(A)

<u>CGGGATCCCC</u>	GGGTATGACT	GAGACTGCTT	ACGGTAACGC
TCAGGATCTT	CTTGTGAGC	TTACTGCTGA	TATCGTTGCT
GCTTACGTTT	CTAACCAACGT	TGTTCCCTGTT	ACTGAGCTTC
CTGGACTTAT	CTCTGATGTT	CATACTGCAC	TTTCTGGAAC
ATCTGCTCCT	GCTTCTGTTG	CTGTTAACGT	TGAGAAGCAG
AAGCCTGCTG	TTTCTGTTCG	TAAGTCTGTT	CAGGATGATC
ATATCGTTTG	TTTGGAGTGT	GGTGGTTCTT	TCAAGTCTCT
CAAGCGTCAC	CTTACTACTC	ATCACTCTAT	GACTCCAGAG
GAGTATAGAG	AGAAAGTGGGA	TCTTCCTGTT	GATTACCCCTA
TGGTTGCTCC	TGCTTACGCT	GAGGCTCGTT	CTCGTCTCGC
TAAGGAGATG	GGTCTCGGTC	AGCGTCGTAA	GGCTAACCGT
CCAAAAAAAGA	AGCGTAAGGT	CTGAGAGCTC	GC

FIGURE 1(B)

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M T E T A Y G N A Q D L L V E
ATG ACN GAR ACN GCN TAY GGN AAY GCN CAR GAY YTN YTN GTN GAR

L T A D I V A A Y V S N H V V
YTN ACN GCN GAY ATH GTN GCN GCN TAY GTN WSN AAY CAY GTN GTN

P V T E L P G L I S D V H T A
CCN GTN ACN GAR YTN CCN GGN YTN ATH WSN GAY GTN CAY ACN GCN

L S G T S A P A S V A V N V E
YTN WSN GGN ACN WSN GCN CCN GCN WSN GTN GCN GTN AAY GTN GAR

K Q K P A V S V R K S V Q D D
AAR CAR AAR CCN GCN GTN WSN GTN MGN AAR WSN GTN CAR GAY GAY

H I V C L E C G G S F K S L K
CAY ATH GTN TGY YTN GAR TGY GGN GGN WSN TTY AAR WSN YTN AAR

R H L T T H H S M T P E E Y R
MGN CAY YTN ACN ACN CAY CAY WSN ATG ACN CCN GAR GAR TAY MGN

E K W D L P V D Y P M V A P A
GAR AAR TGG GAY YTN CCN GTN GAY TAY CCN ATG GTN GCN CCN GCN

Y A E A R S R L A K E M G L G
TAY GCN GAR GCN MGN WSN MGN YTN GCN AAR GAR ATG GGN YTN GGN

Q R R K A N R P K K K R K V
CAR MGN MGN AAR GCN AAY MGN CCN AAR AAR MGN AAR GTN

FIGURE 1(C)

ROS Inverted Repeat DNA Binding Sites (Operator sequences)

TATATTCAA-TTTTA-TTGTAATATA

virC/virD

***** * * * * * * * * * *

TATAATTA_{AAA}ATATTA_{ACTGTCGCATT} *ipt*

FIGURE 1 (D)

Comparison of ROS DNA Binding Site (Operator) Sequences

VirC/VirD

TATATTTCAA
TATATTACAA

ipt

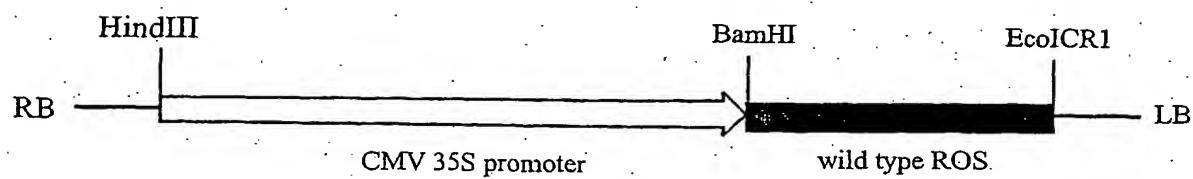
TATAATTAAA
AATGCGACAG

Consensus

WATDHWKMAR

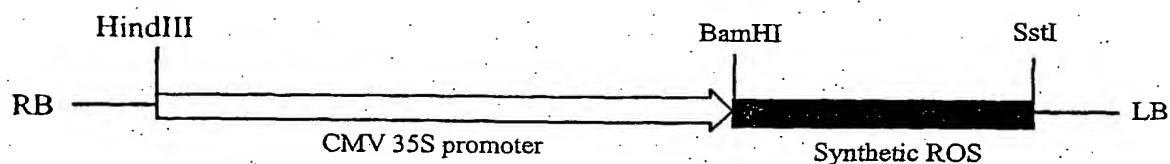
FIGURE 1 (E)

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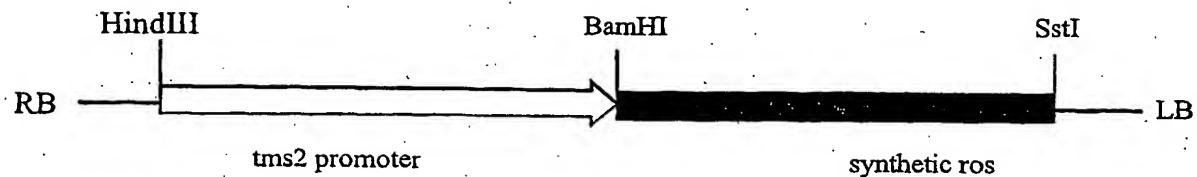
p74-107

FIGURE 2(A)



p74-313

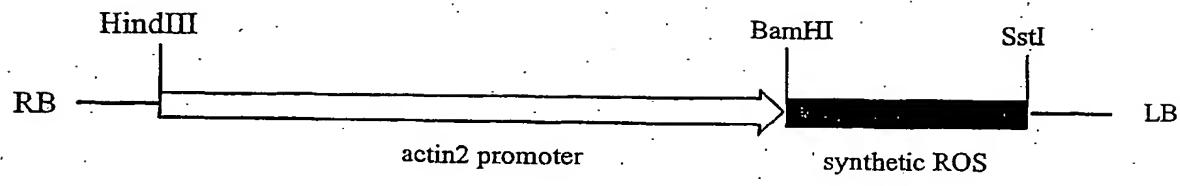
FIGURE 2(B)



p74-108

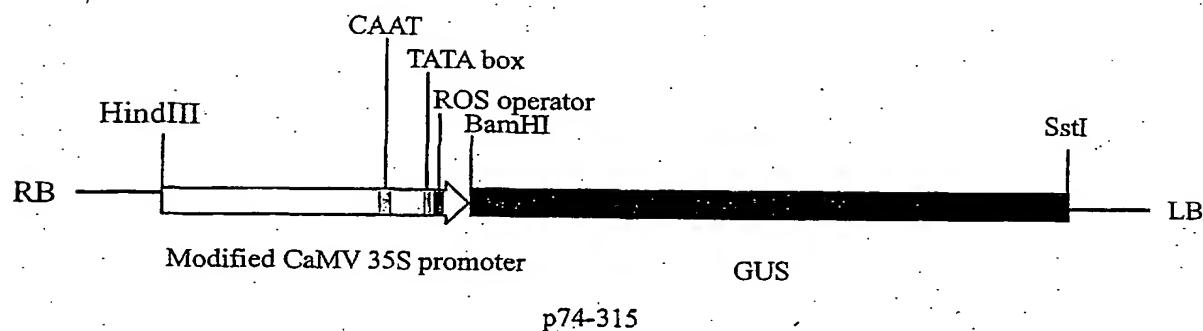
FIGURE 2(C)

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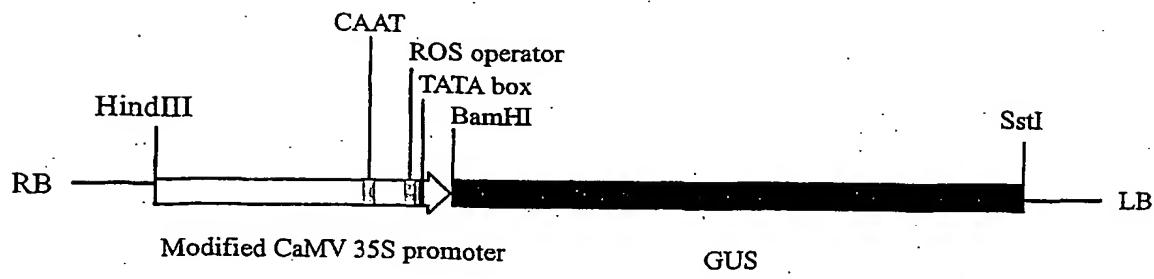
p74-101

FIGURE 2(D)



p74-315

FIGURE 3(A)



p74-316

FIGURE 3(B)

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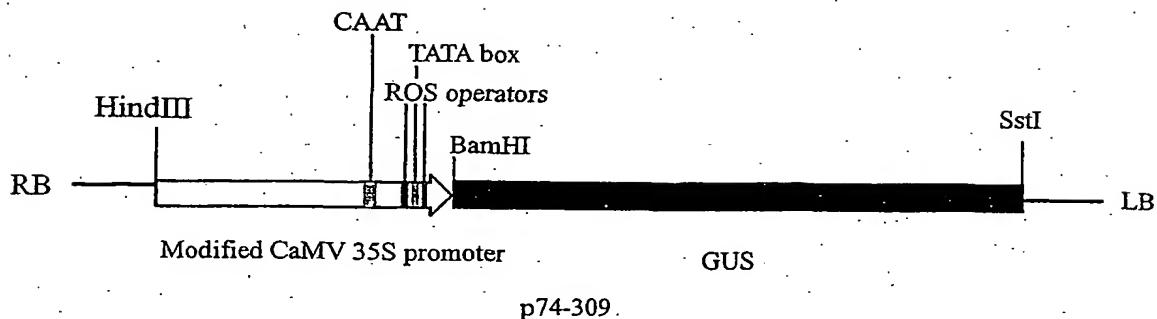


FIGURE 3(C)

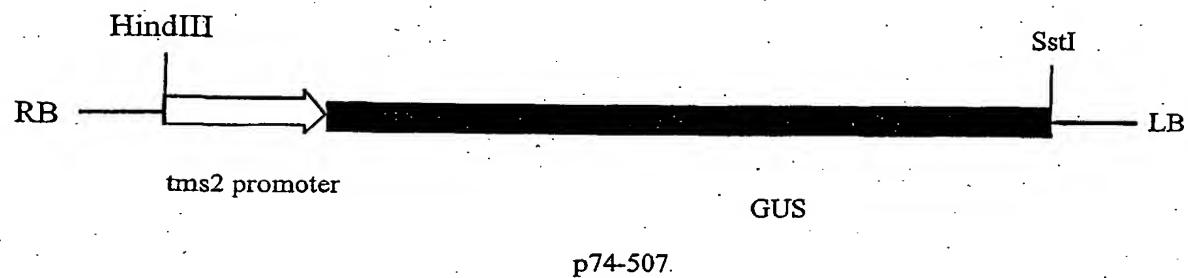


FIGURE 4(A)

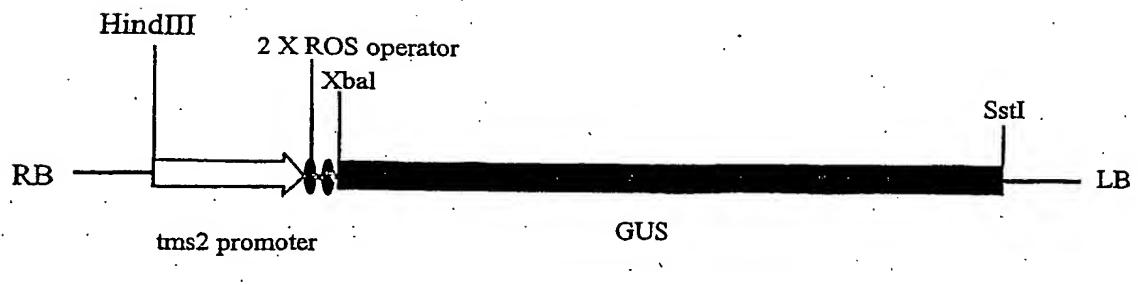
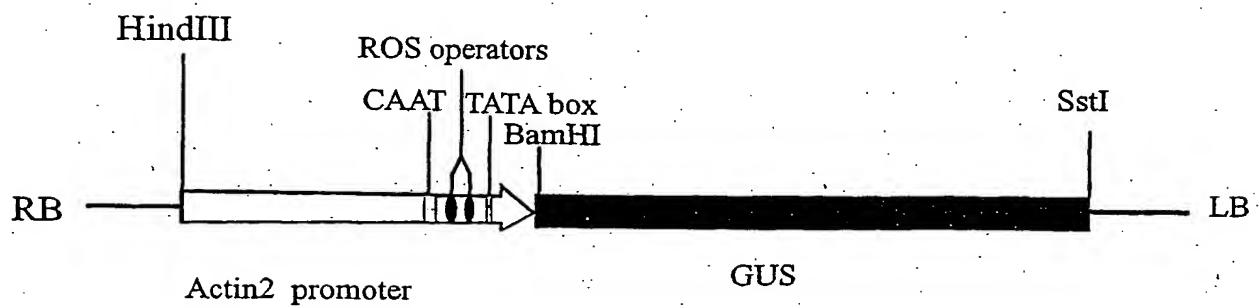


FIGURE 4(B)



p75-101

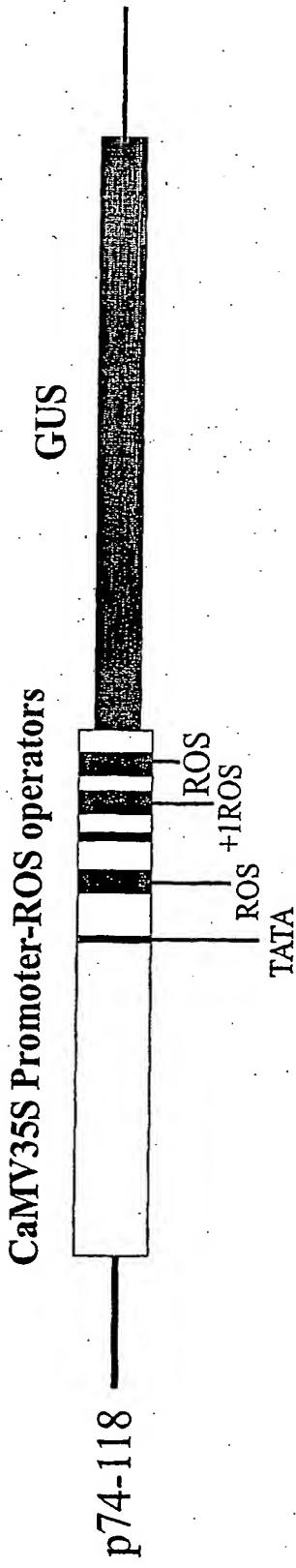
FIGURE 5(A)



p74-501

FIGURE 5(B)

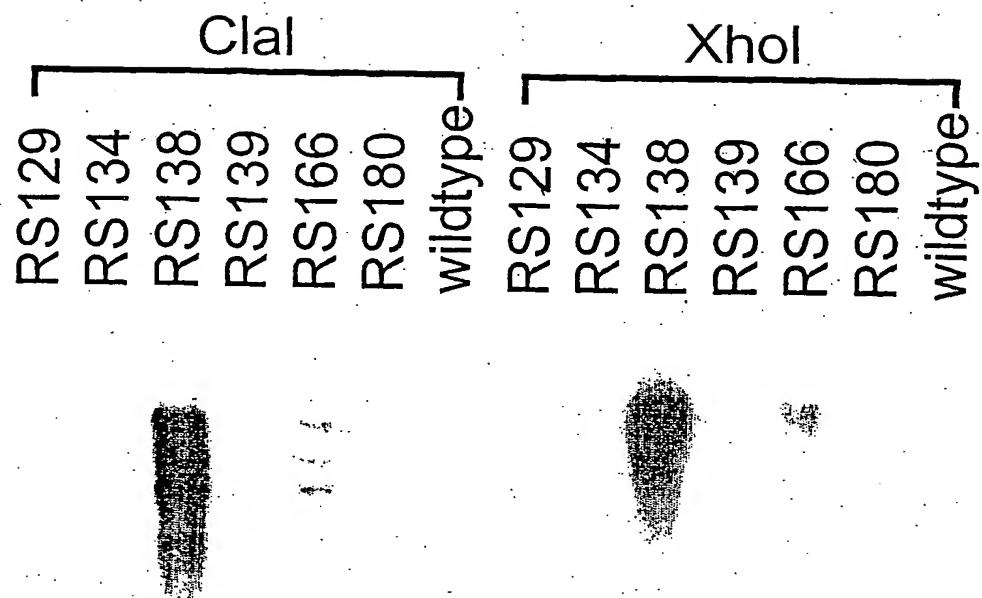
Reporter Construct



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FIGURE 5(C)



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Southern blot of Genomic DNA of p74-309 lines. DNA was digested with Clal or Xhol, and the blot was probed with the ORF of the GUS gene.

FIGURE 6(A)

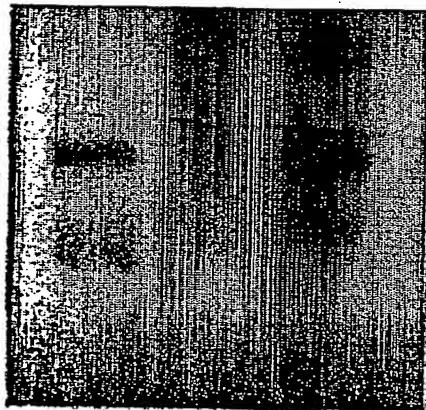
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p74-101

RS 91

RS 93

RS 121

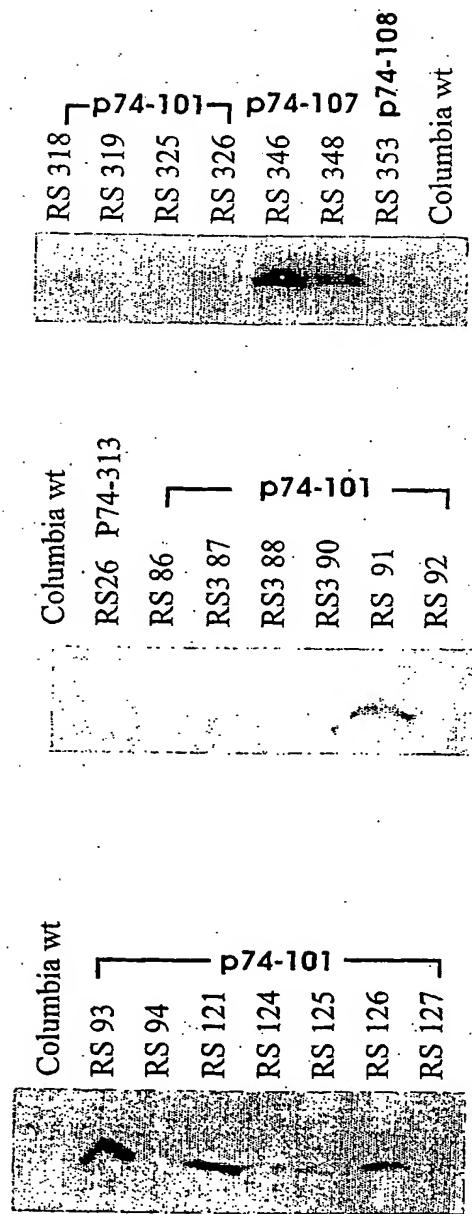


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**Southern blot of DNA from p74-101 T1 plants.
HindIII digests probed with NPTII**

FIGURE 6(B)

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Western blot analysis of total protein from T12 plants probed with ROS antibody

FIGURE 7

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Columbia wt

pBI121

p74-501

buffer

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FIGURE 8

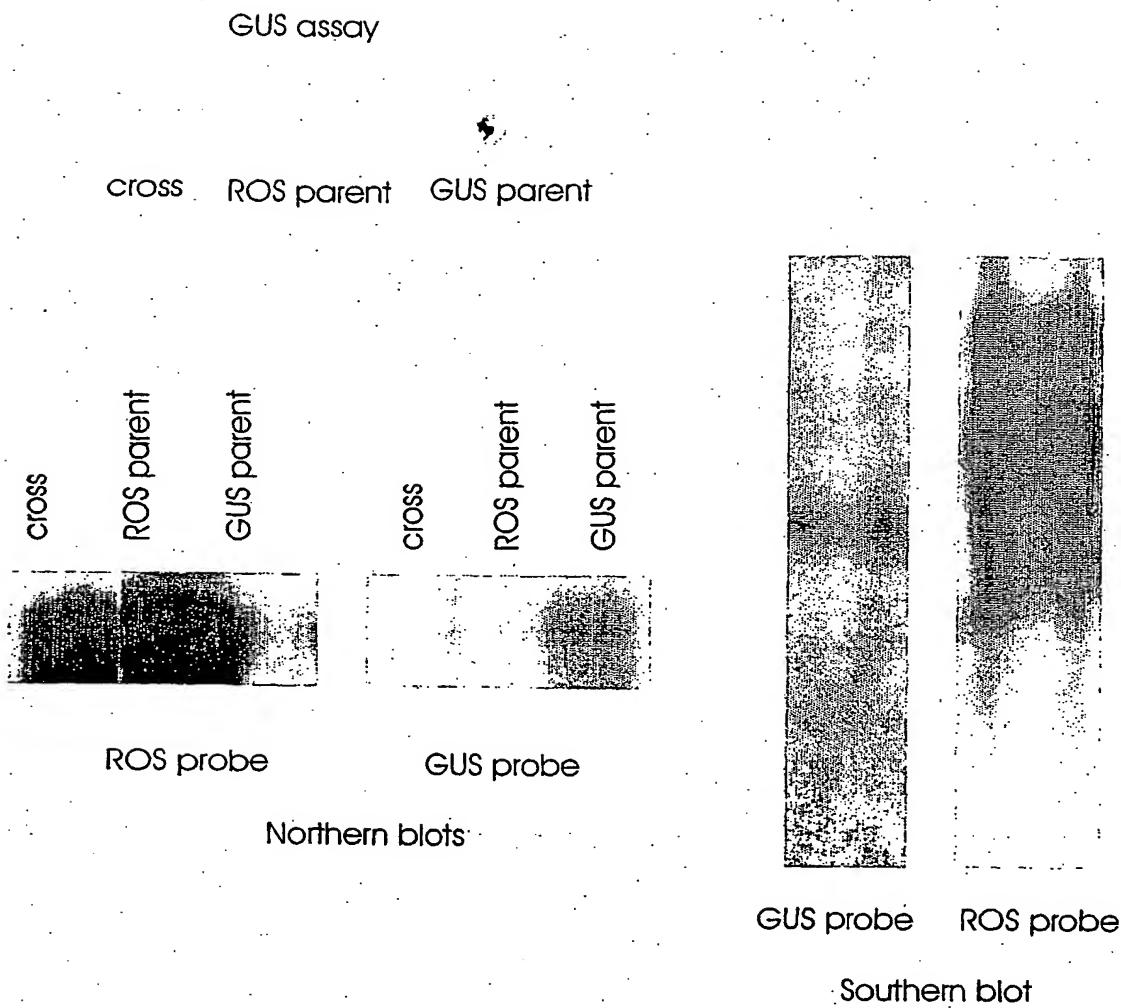


FIGURE 9